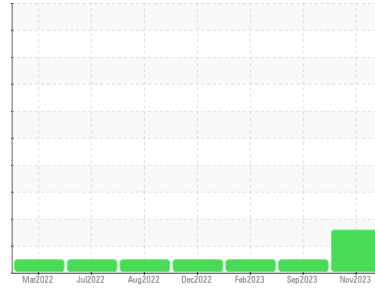


# OIL ANALYSIS REPORT

Sample Rating Trend

**DEGRADATION**

Machine Id  
**721564**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- QTS)**



## DIAGNOSIS

**Recommendation**  
 We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is no indication of any contamination in the oil.

**Fluid Condition**  
 The oil viscosity is higher than normal. The BN level is low. The oil is no longer serviceable.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PCA0113376</b>	PCA0106250	PCA0092388
Sample Date	Client Info	<b>21 Nov 2023</b>	19 Sep 2023	14 Feb 2023
Machine Age	mls	Client Info	<b>0</b>	0
Oil Age	mls	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	Not Changd
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>88</b>	64	63
Chromium	ppm ASTM D5185m >20	<b>4</b>	3	1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	<1	0
Aluminum	ppm ASTM D5185m >20	<b>7</b>	6	9
Lead	ppm ASTM D5185m >40	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >330	<b>8</b>	7	17
Tin	ppm ASTM D5185m >15	<b>0</b>	0	0
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	<b>11</b>	8	12
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>62</b>	65	69
Manganese	ppm ASTM D5185m 0	<b>1</b>	1	<1
Magnesium	ppm ASTM D5185m 950	<b>854</b>	964	854
Calcium	ppm ASTM D5185m 1050	<b>1428</b>	1493	1218
Phosphorus	ppm ASTM D5185m 995	<b>1138</b>	1246	880
Zinc	ppm ASTM D5185m 1180	<b>1412</b>	1596	1118
Sulfur	ppm ASTM D5185m 2600	<b>2598</b>	3016	2459

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>5</b>	5	5
Sodium	ppm ASTM D5185m	<b>4</b>	0	1
Potassium	ppm ASTM D5185m >20	<b>9</b>	7	20

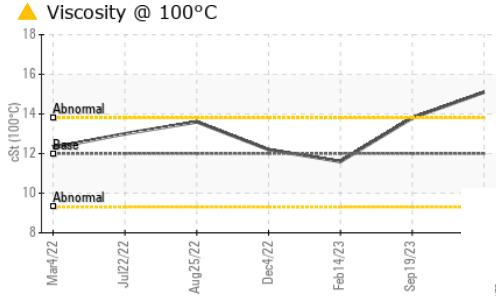
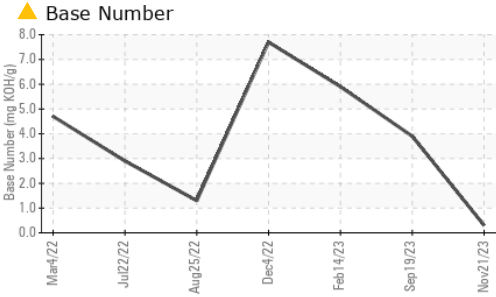
## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>2.8</b>	2	1.4
Nitration	Abs/cm *ASTM D7624 >20	<b>19.3</b>	15.2	12.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>38.8</b>	31.5	25.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>47.5</b>	34.1	25.4
Base Number (BN)	mg KOH/g ASTM D2896	<b>0.3</b>	3.9	5.9

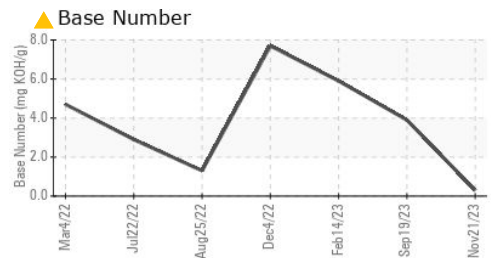
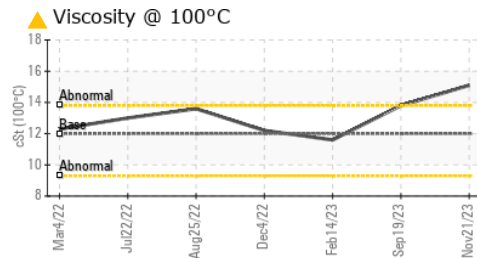
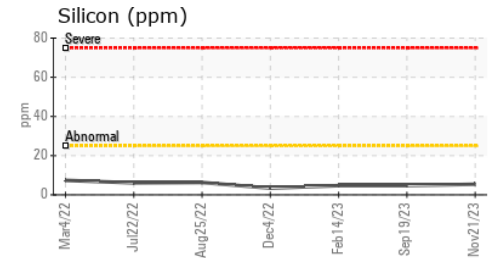
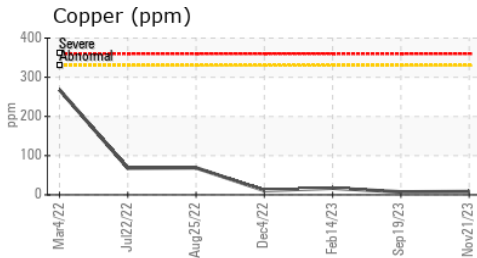
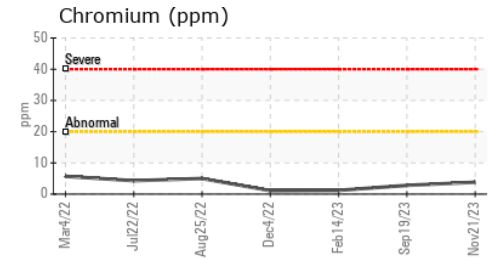
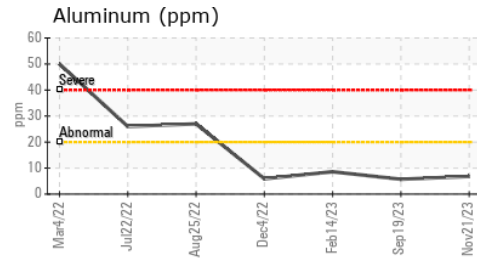
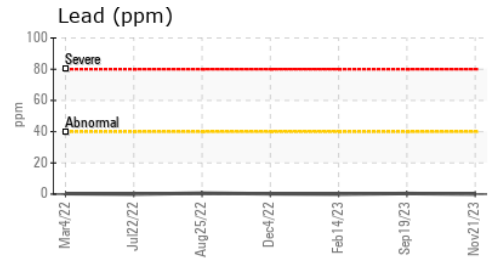
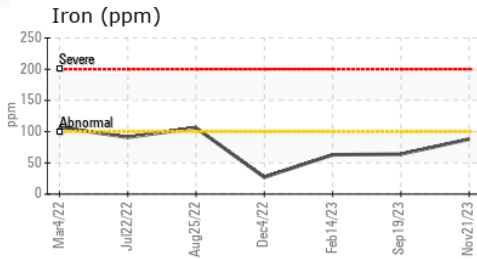
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	▲ 15.1	13.8	11.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0113376 **Received** : 08 Dec 2023  
**Lab Number** : 06029172 **Diagnosed** : 11 Dec 2023  
**Unique Number** : 10778963 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**MILLER TRUCK LEASING #119**  
 39 INDUSTRIAL AVE  
 HASBROUCK HEIGHTS, NJ  
 US 07604  
 Contact: MIKE LONGETTE  
 mlongette@millertransgroup.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: (201)528-7053